

**METHOD AND APPARATUS FOR PROVIDING
IP MOBILITY FOR MOBILE NETWORKS
AND DETACHABLE MOBILE NETWORK NODES**

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ABSTRACT OF THE DISCLOSURE

An IP mobility solution for mobile network(s) (110) defining mobile
routers (112) detachably connected to one or more mobile network nodes (116).
10 When attached to the mobile router, the mobile network nodes create a binding
between their home address and a home address of their attached mobile router.
The mobile router creates a binding between its mobile subnet prefix (or home
address) and a care of address. The bindings are sent to various correspondent
nodes (126) having sent packets non-optimally to the mobile network nodes. The
15 bindings are updated, as appropriate, responsive to movement of the mobile
network to other networks, including other mobile networks, and/or responsive to
the mobile nodes detaching from the mobile network and roaming independently
to other networks, including other mobile networks. The correspondent nodes
store the bindings and updates, if any, in a binding cache (208) and consult the
20 binding cache to determine how packets should be directed on next attempt(s) to
reach the mobile network node.